

Applicant : Vincent P. Stanton,
Serial No. : 09/658,659.
Filed : September 8, 2000
Page : 2

Attorney's Docket No.: 11926-015001

3150 2756A>G D919G
3207 2813G>T S938I
3209 2815G>C G939R
5444 5050C>A 3'
5551 5157G>A 3'
5573 5179C>T 3'
5659 5265T>C 3'
5678 5284T>C 3'
5874 5480C>T 3'
5934 5540A>G 3'

D78586 D78586 114010 GEN-BR CAD PROTEIN (SEQ
ID NO:2)

3434 3408C>T Silent
4313 4287T>C Silent
4799 4773A>G Silent
5255 5229C>T Silent
5455 5429G>A R1810Q
5507 5481T>C Silent
5810 5784C>T Silent
6128 6102C>T Silent
6626 6600C>T Silent
6686 6660C>T Silent

U09178 U09178 274270 GEN-HA
Dihydropyrimidine Dehydrogenase (SEQ ID NO:3)

166 85T>C C29R
577 496A>G M166V
638 557A>G Y186C
1708 1627A>G I543V
3432 3351T>C 3'
3682 3601C>T 3'
3730 3649G>A 3'
3925 3844A>G 3'
3937 3856T>C 3'

U19720 U19720 600424 GEN-I1 Folate
Transporter (SLC19A1) (SEQ ID NO:4)

175 80G>A R27H
341 246C>G Silent
791 696C>T Silent
1067 972G>A Silent
1337 1242C>A Silent
1997 1902T>C 3'
2100 2005^2006insG 3'
2582 2487T>G 3'
2617 2522C>T 3'
2652 2557T>C 3'

Sub E1

B2
cont

on 8

B

Applicant : Vincent P. Stanton,
Serial No. : 09/658,659.
Filed : September 8, 2000
Page : 3

Attorney's Docket No.: 11926-015001

U92868 U92868 600424 GEN-LUK Homo sapiens reduced
folate carrier (RFC1) gene, exons 1a, 1c and 1b (SEQ ID NO:5)

431 431A>G Intron
441 441A>G Intron
498 498C>T Intron
579 579G>C Intron
599 599G>C Intron

X02308 X02308 188350 GEN-KL Thymidylate
synthetase (SEQ ID NO:6)

1066 961T>C 3'
1136 1031A>G 3'
1497 1392T>A 3'

D00517 D00517 188350 GEN-LUC Thymidylate
synthase, promoter (SEQ ID NO:7)

276 276C>T Intron
321 321T>C Intron
452 452G>A Intron
457 457^insC Intron
491 491C>A Intron
533 533T>C Intron
624 624A>C Intron
639 639A>G Intron
655 655T>C Intron

D00596 D00596 188350 GEN-LUD Homo sapiens
gene for thymidylate synthase, exons 1, 2, 3, 4, 5, 6, 7,
complete cds (SEQ ID NO:8)

701 701A>C Intron
716 716A>G Intron
732 732T>C Intron
1293 1293A>G Intron
1322 1322C>G Intron
1379 1379T>C Intron
1590 1590C>T Intron
1688 1688C>G Intron
2401 2401A>G Intron
2429 2429G>A Intron
2488 2488C>T Intron
2594 2594G>T Intron
2618 2618G>A Intron
3083 3083G>A Intron
3125 3125G>A Intron
3212 3212C>T Intron
3619 3619T>A Intron
3635 3635G>A Intron
4256 4256G>A Intron

B

Applicant : Vincent P. Stanton,
Serial No. : 09/658,659
Filed : September 8, 2000
Page : 4

Attorney's Docket No.: 11926-015001

4898 4898A>G Intron
5006 5006C>T Intron
5062 5062G>A Intron
5167 5167G>A Intron
11069 11069A>G Intron
11238 11238C>T Intron
11293 11293T>G Intron
11422 11422T>C Intron
11686 11686C>T Intron
12598 12598T>C Intron
13171 13171T>C Intron
13298 13298G>A Intron
13645 13645T>C Intron
13751 13751C>A Intron
13782 13782T>C Intron
13806 13806T>C Intron
13813 13813T>C Intron
14479 14479A>G Intron
14546 14546^insT Intron
14585 14585C>T Intron
14729 14729G>A Intron
14787 14787C>T Intron
14795 14795G>A Intron
15041 15041T>C Intron
15343 15343G>A Intron
15449 15449G>A Intron
15502 15502G>A Intron
15545 15545C>T Intron
15589 15589A>G Intron
15769 15769C>T 3'
15839 15839A>G 3'
16148 16148G>A 3'
16198 16198T>G 3'
16202 16202G>T Intron

X59618 X59618 180390 GEN-M3 Ribonucleotide
reductase M2 polypeptide (SEQ ID NO:9)
128 (-67)G>A 5'
189 (-6)T>G 5'
524 380C>G Silent
1399 1205T>A 3'
1464 1270G>A 3'
1636 1442C>T 3'
1738 1544C>T 3'
2259 2065T>C 3'

SubE1

DR
cont

B

Applicant : Vincent P. Stanton,
Serial No. : 09/658,659.
Filed : September 8, 2000
Page : 5

Attorney's Docket No.: 11926-015001

Sub E1

S72487	S72487	131222	GEN-3LD	Thymidine
phosphorylase, partial		(SEQ ID NO:10)		
183		19G>A		D7N
483		319C>T		3'
601		437G>C		3'
1299		1135G>A		3'

BB cont

M58602	M58602	131222	GEN-LUB	Thymidine
phosphorylase, promoter and genomic		(SEQ ID NO:11)		

124	124C>T	3'
439	439G>A	3'
1044	1044^insCT	3'
1331	1331G>A	3'
1977	1977G>A	Intron
2149	2149G>A	Intron
2467	2467A>G	Intron
2634	2634C>G	Intron
2975	2975G>A	Intron
3116	3116G>T	Intron
3255	3255A>C	Intron
3344	3344T>C	Intron
4051	4051C>A	Intron
4782	4782G>A	Intron
5022	5022T>C	Intron
5266	5266G>A	Intron
5285	5285C>G	Intron
5438	5438T>A	Intron
5482	5482C>T	Intron
5629	5629G>A	Intron
5648	5648C>T	Intron
5731	5731G>A	Intron

M98045	M98045	136510	GEN-4C3	Homo sapiens
folylpolyglutamate synthetase mRNA, complete cds		(SEQ ID NO:12)		

802	732C>T	Silent
1747	1677G>T	3'
1900	1830T>C	3'

U24253	U24253	136510	GEN-LUE	Human
folylpolyglutamate synthetase (FPGS) gene, exons 5-11, and		partial cds (SEQ ID NO:13)		

1424	1424C>A	Intron
1649	1649G>A	Intron
2554	2554A>G	Intron

U24252	U24252	136510	GEN-LUF	
Folylpolyglutamate synthetase, promoter and exons 1-4		(SEQ ID NO:14)		

263	263A>G	Intron
-----	--------	--------

211

B

Applicant : Vincent P. Stanton,
Serial No. : 09/658,659
Filed : September 8, 2000
Page : 6

Attorney's Docket No.: 11926-015001

266 266G>T Intron
527 527C>G Intron
1037 1037A>G 5'
1139 1139G>A Intron
1217 1217C>T Intron
1647 1647C>T Intron
1955 1955G>A Intron
2017 2017G>A Intron
2037 2037G>A Intron
2189 2189A>G Intron
2282 2282C>T Intron
2309 2309A>G Intron

U09806 U09806 236250 GEN-4FZ Human
methylenetetrahydrofolate reductase mRNA, partial cds (SEQ ID
NO:15)

120 120T>C Silent
464 464T>G M155R
519 519C>T Silent
668 668C>T A223V
1059 1059T>C Silent
1289 1289C>A 3'
1308 1308T>C 3'
1784 1784G>A 3'

AF061655 AF061655 123920 GEN-LUJ Cytidine
deaminase, promoter (SEQ ID NO:16)

575 575T>C Intron
648 648T>C Intron
771 771G>C Intron
883 883G>A Intron
941 941^insC 5'
1051 1051A>C K27Q

In the Claims

Amend claims 171, 172, and 181 as follows.

171. (amended) An isolated nucleic acid probe comprising at least 15 contiguous nucleotides of the nucleotide sequence of SEQ ID NO:15 (methylenetetrahydrofolate reductase), the probe comprising at least one of:

- (a) nucleotide 120 wherein N is C;
- (b) nucleotide 464 wherein N is G;
- (c) nucleotide 519 wherein N is T;
- (d) nucleotide 668 wherein N is T;
- (e) nucleotide 1059 wherein N is C;